

Algorithm Design
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Solution of Exercise R-8.1

Perform a depth-first search from s , limiting the search to edges that have some residual flow left, much like we are looking for an augmenting path. Define the cut $\chi = (V_s, V_t)$ to be defined so that V_s is the set of all vertices reached during this DFS. By the Max-Flow, Min-Cut Theorem, this cut is a minimum cut.